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| 10/598,078 | 08/17/2006 | Felix Henric Govert Ogg | US040130 | 9850 |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|--------------------------------------|-----------------------------------|
| Office Action Summary | Application No. 10/598,078 | Applicant(s) OGG ET AL. |
| | Examiner Andrew M. Tecco | Art Unit 3764 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 20 November 2008.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-20 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 17 August 2006 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/06/08)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____

5) Notice of Informal Patent Application

6) Other: _____

DETAILED ACTION

1. Examiner acknowledges receipt of the applicant's response filed 20 November 2008. Claims 1-20 are pending. An action on the merits follows.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1-2, 4-5, 7, are 9-11, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by McHugh (US Patent 6,230,047).**

Regarding claim 1, McHugh discloses an audio pacing device (10), comprising:
a sensing unit (20) to obtain a parameter of a user in physical exercise;
a memory (32 – **memory, col. 4 line 67**) to store a plurality of audio signals having predetermined tempo values (**col. 6 lines 23-34**); and
a processing unit (**32 – processor chip, col. 4 line 66**) configured to determine whether intensity of the parameter of the user should be increased, decreased or maintained by using the parameter of the user from the sensing unit and a

predetermined reference value (**col. 5 lines 56 – col. 6 line 6**), and select an audio signal having a tempo that enables the user to increase, decrease or maintain the intensity (**col. 5 lines 56 – col. 6 line 6**).

Regarding claim 2, McHugh discloses the parameter is a pulse rate (**20; Abstract**).

Regarding claim 4, McHugh discloses the tempo comprises a beat (**col. 5 lines 1-6**). McHugh doesn't disclose the beat per minute values of such rhythms, but it is inherent to any beat/rhythm that it has a beat per minute value.

Regarding claim 5, McHugh discloses the sensing unit is a heart rate monitor (**20**).

Regarding claim 7, McHugh discloses the sensing unit and the processing unit are connected in a wired or wireless way (**#22, 26, 30; col. 4 lines 60-68**).

Regarding claim 9, McHugh discloses the predetermined reference value includes reference values selected by a user or a programmed exercise routine (**col. 5 line 61—col. 6 line 6**).

Regarding claim 10, McHugh discloses the audio signals are categorized based on their tempo value (**col. 5 lines 1-9**).

Regarding claim 11, McHugh discloses the predetermined tempo values of the plurality of audio signal are determined by the audio pacing device (**col. 5 lines 1-6**). The examiner is broadly interpreting the term "tempo value" to mean an inherent property of a beat or rhythm that relates to a general speed at which a sound occurs.

Regarding claim 14, McHugh discloses an audio pacing method, comprising the steps of:

receiving a parameter of a user in physical exercise from a sensing unit (**20**);
determining whether intensity of the parameter of the user should be increased, decreased or maintained by using the parameter of the user from the sensing unit and a predetermined reference value (**col. 5 lines 61-67**);
selecting an audio signal having a tempo that enables the user to increase, decrease or maintain the intensity (**col. 5 lines 61-67**).

3. **Claims 1, 3, 6, 8 and 20** are rejected under 35 U.S.C. 102(e) as being anticipated by **Lee et al. (US Patent 6,837,827)** or, in the alternative, under 35 U.S.C. 103(a) as obvious over **Lee et al. (US Patent 6,837,827)** hereinafter referred to as **Lee** in view of **Curtin (US Patent 5,986,200)**.

Regarding claim 1, Lee discloses an audio pacing device (**10**), comprising:

a sensing unit (40) to obtain a parameter of a user in physical exercise;

a memory (64) to store a plurality of audio signals (**col. 9 lines 26-30**) having predetermined tempo values; and

a processing unit (60) configured to determine whether intensity of the parameter of the user should be increased, decreased or maintained by using the parameter of the user from the sensing unit and a predetermined reference value (**col. 9 lines 21-26**), and select an audio signal having a tempo that enables the user to increase, decrease or maintain the intensity (**col. 9 lines 26-50**).

In the alternative, although the examiner considers Lee to disclose a plurality of audio tones and music stored on the device, Curtain further teaches that it is known to have an interactive music playback device in which the audio signals are stored on a memory unit (**Abstract**).

Given the teachings of Curtain, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the audio signal files of Lee stored on a memory. Doing so would allow the device to playback the sounds without relying on a separate device.

Regarding claim 3, Lee discloses parameter is a step-speed rate (**col. 9 lines 33-41**).

Regarding claim 6, Lee discloses the sensing unit is a step-speed measurement unit (**col. 9 lines 33-41**).

Regarding claim 8, Lee discloses the processing unit is further configured to adjust the tempo of a selected audio signal by a predetermined amount (**col. 9 lines 51-66**).

Regarding claim 20, Lee discloses an audio pacing device, comprising:

- a sensing unit (**40**) to obtain a parameter that is representative of a status of a user in motion;
- a memory (**64**) to store a plurality of audio signals having predetermined tempo values; and
- a processing unit (**60**) configured to determine whether the parameter should be increased, decreased or maintained by using the parameter from the sensing unit and a predetermined reference value, and select an audio signal having a tempo that enables the user to increase, decrease or maintain the parameter (**col. 9 lines 51-66**).

In the alternative, although the examiner considers Lee to disclose a plurality of audio tones and music stored on the device, Curtin further teaches that it is known to have an interactive music playback device in which the audio signals are stored on a memory unit (**Abstract**).

Given the teachings of Curtain, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the audio signal files of Lee stored on a memory. Doing so would allow the device to playback the sounds without relying on a separate device.

Claims 14, 15, 16, 18, and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by **Lee et al. (US Patent 6,837,827)** hereinafter referred to as **Lee**.

Regarding claim 14, Lee discloses an audio pacing method, comprising the steps of:

receiving a parameter of a user in physical exercise from a sensing unit (**40; col. 9 lines 38-41**);

determining whether intensity of the parameter of the user should be increased, decreased or maintained by using the parameter of the user from the sensing unit and a predetermined reference value (**col. 9 lines 51-66**);

selecting an audio signal having a tempo that enables the user to increase, decrease or maintain the intensity (**col. 9 lines 25-36 and 60-66**).

Regarding claim 15, Lee discloses the step of adjusting the tempo of a selected audio signal (**col. 9 lines 55-58**).

Regarding claim 16, Lee discloses the step of a user selecting the said predetermined reference value from a group of reference values or a programmed exercise routine (**col. 9 lines 21-26**).

Regarding claim 18, Lee discloses the parameter is a step speed rate (**col. 9 lines 33-41**).

Regarding claim 19, Lee discloses the sensing unit (**40**) a step-speed measurement unit (**col. 9 lines 33-41**).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. **Claims 12 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over **McHugh (US Patent 6,230,047)**.

Regarding claim 12, McHugh discloses that the invention may further comprise a musical playback device such as a MP3 player (**col. 2 lines 9-11**). While McHugh does not specifically disclose using MP3 files for the audio signals, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate MP3 files as an encoding means of the audio signals.

MP3 files were common and well known in the art at the time the invention was made as a means of encoding audio signals and as suggested by McHugh, could have been incorporated into the invention of McHugh. Doing so would allow the device to carry a relatively high quality sound for the beat and rhythm signals without having to utilize a large amount of memory.

Regarding claim 17, McHugh discloses that the invention may further comprise a musical playback device such as a MP3 player (**col. 2 lines 9-11**). While McHugh does not specifically disclose using MP3 files for the audio signals, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate MP3 files as an encoding means of the audio signals.

MP3 files were common and well known in the art at the time the invention was made as a means of encoding audio signals and as suggested by McHugh, could have been incorporated into the invention of McHugh. Doing so would allow the device to carry a relatively high quality sound for the beat and rhythm signals without having to utilize a large amount of memory.

8. **Claim 13** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Lee et al. (US Patent 6,837,827)** hereinafter referred to as **Lee** in view of **Curtin (US Patent 5,986,200)** in view of **McHugh (US Patent 6,230,047 B1)** as taught by **Richardson et al. (US Patent 6,135,951)** hereinafter referred to as **Richardson**.

Regarding claim 13, Lee discloses an audio pacing device (**10**) with a first sensing unit (**40**) and a first parameter (**col. 9 lines 38-41**) and a switch (**fig. 2; #56**) to alternate between different modes of use (**col. 5 lines 29-38**).

Lee in view of Curtin doesn't disclose a second sensor as part of the alternate / second modes.

However, McHugh teaches another audio pacing device (**10**) with a different mode of operation having an alternate sensing unit (**20**) and parameter (**col. 5 line 61 – col. 6 line 6**).

Since Richardson teaches that during an exercise event a user would be concerned with speed pacing and heart rate (**col. 1 lines 8-30**), it therefore would have been obvious to one of ordinary skill in the art at the time the invention was made to include McHugh's sensing unit and parameter as an alternate / second mode in the device of Lee. Doing so would allow the user to be aware of their speed pacing as well as heart rate during an exercise routine.

Response to Arguments

9. Applicant's arguments filed 20 November 2008 have been fully considered but they are not persuasive.
10. With regards to applicants arguments of independent claims 1, 14, and 20 that McHugh fails to disclose the limitation of "a processing unit configured to determine whether intensity of the parameter of the user should be increased, decreased or maintained by using the parameter of the user from the sensing unit and a predetermined reference value, and select an audio signal having a tempo that enables the user to increase, decrease or maintain the intensity" the examiner respectfully disagrees. Processor (32) does determine intensity of the parameter of the user should be increased, decreased or maintained by using the parameter of the user from the sensing unit and a predetermined reference value as shown in col. 5 line 56 – col. 6 line

6. By not playing a rhythm when the heart rate is above or below a certain level this is, as broadly interpreted by the examiner, determining whether intensity of the parameter of the user should be increased, decreased or maintained. The processor chip also selects an audio signal having a tempo that enables the user to increase, decrease or maintain the intensity as shown in col. 5 lines 1-5. It is this audio signal that is utilized by the invention as depicted in col. 5 line 56 – col. 6 line 6 that enables the user to increase, decrease or maintain the intensity.

11. With regards to applicant's argument of the Lee reference that GPS component (40) does not equate to a "parameter of a user in physical exercise", the examiner respectfully disagrees. As shown in col. 9 lines 38-41, Lee cites that the GPS component is used to measure a user's speed. Speed is a widely accepted parameter of physical exercise of which the intensity can be increased, decreased, or maintained.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew M. Tecco whose telephone number is 571-270-3694. The examiner can normally be reached on 5/4/9; 8-5 M-R 1st Fri off, 2nd Fri 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, LoAn Thanh can be reached on 571-272-4966. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew M Tecco/
Examiner, Art Unit 3764

/Fenn C Mathew/
Primary Examiner, Art Unit 3764
February 2, 2009

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